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ABSTRACT

The major virtue of educational criticism is that it expands our understanding of how we come to know, consequently creating new avenues for educational evaluation and research. The task of the educational critic is to write in a manner enabling the reader to vicariously participate in classroom life, thus becoming familiar with the emotional aspects of teaching. (JD)

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The Use of Qualitative Forms of Evaluation for Improving Educational Practice

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Occasional Paper No. 10

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THE USE OF QUALITATIVE FORMS OF EVALUATION FOR IMPROVING EDUCATIONAL PRACTICE

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During the past five years my students at Stanford and I have been attempting to develop and articulate, both theoretically and practically, a qualitative, artistically-grounded approach to educational evaluation. My interest in such an approach has developed out of an uneasiness that I have long felt with the tacit assumptions and explicit procedures embedded in conventional methods of evaluation. These methods participate in a tradition that has occupied a commanding position not only in the field of evaluation but in educational research as well. That tradition, as is well known, is rooted in the aspiration to apply the methods of science to the study and explanation of social phenomena. It is tradition that undergirds most departments of psychology, sociology and economics. It is tradition upon which most of the prestigious schools and departments of education in the universities of this country and my own have been built, and it is tradition into which most aspiring doctoral students are socialized.

Although I feel uneasy about the conventional methods of evaluation, I should say, and hastily, that my uneasiness does not lead me to a point at which I reject scientific approaches to either evaluation or educational research. Rather, my uneasiness results from the feeling that such approaches and the methods of inquiry that are regarded as legitimate within their borders somehow fail to tell the whole story. As a result of the partial view that such methods provide, a biased--even a distorted picture of the reality that we are attempting to understand and improve can occur. In some respects this result is paradoxical because the stringent canons of social science methodology are the product of a desire to reduce bias and diminish distortion and the claim that they may in fact contribute to bias and distortion is a severe critique, if true, and a paradox of their intention.

But my uneasiness with conventional methods of scientifically grounded evaluation does not emanate solely from the constraints imposed upon them by their epistemological commitments. It also emanates from the goals and intended functions of such evaluation. These goals and functions have been largely concerned with the measurement of performance. The standardized achievement test--whether norm or criterion-referenced--is the paradigmatic tool for educational evaluation.[1] Its primary function is to assess how well a student or a group of students performs. Now there is nothing wrong with knowing how well or how poorly a student performs. Schools have traditionally been concerned with such information and, indeed, ability to perform was the basis for promotion through a graded school system.

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*Paper presented as a part of the Faculty of Education Curriculum Lecture Series, February, 1979. Dr. Eisner's visit was co-sponsored by the Faculty of Education, University of Alberta and The Edmonton Public School System.

Yet schools, insofar as they are educational institutions, should not be content simply with the assessment of performance. Education as a process is concerned with the cultivation of intellectual power and the ability to determine what a student knows or knows how to do is not necessarily useful or sufficient for making that process more effective. Thus, the second source of my uneasiness with conventional approaches to evaluation is that they focus almost exclusively on the products of the enterprise--a narrow slice at that--while they neglect the conditions, context, and interactions that led to these consequences. In practical terms, they provide very little that is of use to the teacher in order to know what to alter or what to maintain in the course of teaching or in the design of curriculum.

It was these factors, factors that I first felt intuitively rather than explicitly, that motivated the direction my students and I have taken over the past five years. In the past two years it has become clear to me that the issues I have been attempting to address go far deeper than I had initially realized. At the base of my concern is a desire to secure an understanding of mind, to create an image of what man is, and to learn how he comes to know. At base, the issues with which I have been concerned reside in grasping the forms of rationality that humans can employ in the course of their lives.[2] I would like to provide a sketch of these issues for you and to share with you some of the theoretical problems with which my students and I are engaged. Following this I will talk more specifically about the kinds of evaluation that we do and the kinds of unresolved difficulties that they pose.[3]

"Man by nature," remarked Aristotle, "seeks to know." And evaluation also is the means for knowing. But the initial problem, at least for those interested in conceptualizing evaluation, is not one of deciding what to evaluate, but rather of elucidating the means through which knowing is made possible. How is it that man knows? What forms does he employ in order to know? And how does he represent what he knows to others? Perhaps the best place to start is with those aspects of the organism that appear to have obvious functions in cognitive activity. Consider the senses. The human organism, unless congenitally abnormal, is endowed with a variety of sensory systems that make it possible for it to experience the environment in which it functions. Each of these sensory systems provide different kinds of information about the environment. The visual senses give us the visual world, the auditory senses the world of sound, the gustatory senses of taste, and so on. Without these senses our capacity to know would be radically curtailed. Without the opportunity to use our senses, the senses may be irrevocably atrophied.

Although the contribution of the senses to cognition--the act of knowing--seems obvious, its crucial function in knowing has during the past seventy, and more particularly during the past fifty years, been under appreciated. This has been due in part to the influence of positivistic and operationalistic orientations to knowledge. Positivists have

been concerned with problems of meaning and validity and because they regarded speech, number, and text as the only symbol systems capable of providing the conditions through which claims to knowledge could be accepted or refuted, they regarded all other forms of conception and expression as non-cognitive. If a statement concerning the world was couched in non-numerical or non-linguistic terms, it was not truly a statement. It had no cognitive value and hence could not be regarded as having anything to do with knowledge, understanding or meaning.

Now the significance of positivism for those attempting to develop a science of education was crucial. It provided philosophical support for a path taken a quarter century earlier. It meant that cognition as a concept was tied to the conditions under which a particular criterion of verifiability could be applied. The application of logic became an essential criterion through which expression could be assigned to either that class of utterance regarded as meaningful or to another class regarded as meaningless or "emotive". Thus, cognition or knowing became restricted to those forms of expression that were numerical or linguistic (speech or text). Meaningful speech or text was to employ a form possessing logical relations and operational definitions.

Alfred Jules Ayer, one of the leaders of logical positivism, put the argument this way:

> Our charge against the metaphysician is not that he attempts to employ understanding in a field where it cannot profitably venture, but that he produces sentences which fail to conform to the conditions under which alone a sentence can be literally significant. Nor are we ourselves obliged to talk nonsense in order to show that all sentences of a certain type are necessarily devoid of literal significance. We need only formulate the criterion which enables us to test whether a sentence expresses a genuine proposition about a matter of fact, and then point out that the sentences under consideration fail to satisfy it. And this we shall now proceed to do. We shall first of all formulate the criterion in somewhat vague terms, and then give the explanations which are necessary to render it precise.
>
> The criterion which we use to test the genuineness of apparent statements of fact is the criterion of verifiability. We say that a sentence is factually significant to any given person, if, and only if, he knows how to verify the proposition which it purports to express--that is, if he knows what observations would lead him, under certain conditions, to accept the proposition as being true, or reject it as being false. If, on the other

> hand, the putative proposition is of such a character that the assumption of its truth, or falsehood, is consistent with any assumption whatsoever concerning the nature of his future expereince, then, as far as he is concerned, it is, if not a tautaology, a mere pseudo-proposition. The sentence expressing it may be emotionally significant to him; but it is not literally significant. And with regard to questions the procedure is the same. We inquire in every case what observations would lead us to answer the question, one way or the other; and, if none can be discovered, we must conclude that the sentence under consideration does not, as far as we are concerned, express a genuine question, however strongly its grammatical appearance may suggest that it does.[4]

The identification of cognition and meaning with speech and number has had a constricting effect not only on evaluation methodology, but on educational psychology, and, indeed, on our view of curriculum. If schools are believed to have responsibility for fostering human cognitive ability, and if only those fields are considered cognitive that use words or number, then clearly those fields that do not use words or number cannot be, definition, cognitive fields.[5] Furthermore, if knowledge can only be couched in propositions, then any researcher or evaluator who wishes to provide knowledge to the world must, by definition, use words and numbers to do so. The tenets of the positivists, whether in manifest or latent form, have so permeated our view of knowledge and the ways in which it is secured that we often fail to appreciate its limitations.

Let me remind you again about the functions of our senses. They provide access to the environment. They function as channels through which we experience. The content for consciousness that they make possible is far wider than words or number. Indeed, words and number are cultural devices through which we transform and reduce qualities of experience into those particular forms. Our consciousness and hence our knowledge of the world is not limited to either words or number. Each of the senses provide an avenue for experience and each provides a means through which the internal and the external representation of the world becomes possible. I will try to illustrate this with an example.

Let me ask you for a moment to recall your mother's face. Think about the face that you have seen so many times. Recall the experiences you have had for so many years. I am willing to predict that there is not a soul among my readers who does not know what his mother's face looks like. I am willing to predict that when I ask you to recall your mother's face you conjured up not a set of numbers, not a set of words, but an image, a visual image. You thought in pictures rather than in words. Indeed, there are no

numbers that will do justice to your mother's face, yet in principle it is possible to represent that face in centimeters for the length of her nose, mouth, eyes, the circumference of her skull and I suppose even to the number of hairs on her head. Your knowledge of your mother's face and my knowledge of mine, is represented in visual images. What we know in this form is made possible through our sense of sight.

Knowing in this mode has analogues in all of the other senses. And please note that although we secure the image of our mother's face by having the opportunity to empirically encounter it, when she is not present we can reconstruct that image through imagination. Thus, what we know about out mother's face is the result of the way we construe her features in the empirical world. What we can imagine is what we are able to construe in the privacy of our covert imaginative life.

But let us suppose that we now want to help others come to know our mother's face, that we wanted to enable them to know, as we do, how she appears. Here the problem becomes more complex, for what we must do now is to transform an image held in the imagination into a public form. What are the public forms that are available to us? We can, of course, try to describe her face in words and if we are skilled in the use of spoken or written language we might be able to generate an image in the mind of another that is similar to the one we hold. But, as you might imagine, that task would be extremely difficult. If we were skilled at drawing or sculpture we could transform our mental image into a visual one. We could create a public form that presented to the world an image that would enable others to identify our mother from a group of other mothers: if only we knew how to draw or sculpt our task might be somewhat easier.

If we knew how to dance we could create a series of movements that attempted to approximate our mother's face, but even if we were a skilled dancer the special features of our mother's face would not easily be represented in the kind of language that dance can employ. The language of movement is difficult to use to render an image that takes shape in static space.

Now what I believe we can learn from this little scenario is that our knowledge of the world takes shapes in different sensory modalities and that these modalities provide the content from which transformation or symbolic representation is made. The extent to which we are literate in the symbol system appropriate for conveying or making such knowledge public, to that extent we are able to share what we know with others. To the extent that our literacy is limited, to that extent what we know must remain locked in our psyche, a private experience that we are unable to share, and, in a sense, to adequately critique.[6]

What we can also learn is that some types of knowledge do not lend themselves to transformation into some symbol systems. Pictures that are painted of our mother's face even by a semi-skilled artist, are likely to provide a closer likeness than a dance performed by the most skilled dancer. Words, too, will fall short. It appears that what we know, the kinds of concepts

we can form are at least as numerous as the sense modalities we possess. The transformation or rendering of these concepts require skill in a medium, to use Olsen's phrase,[7] and even then some concepts are virtually unrenderable in some languages. Suzanne Langer is quite explicit on this point when she discusses the inability of discursive forms of expression to convey human feeling. She writes as follows:

> Such knowledge is not expressible in ordinary discourse. The reason for this ineffability is not that the ideas to be expressed are too high, too spiritual, or too anything-else, but that the forms of feeling and the forms of discursive expression are logically incommensurate, so that any exact concepts of feeling and emotion cannot be projected into the logical form of literal language. Verbal statement, which is our normal and most reliable means of communication, is almost useless for conveying knowledge about the precise character of the affective life.[8]

I have attempted thus far to identify some of the functions of the sensory systems as vehicles for providing the content for knowing and the relationship between that content and its transformation through a public symbol system. I do not want to give the impression, however, that simple contact with the world is a sensory event that occurs automatically simply because we are sentient beings. The forms our experience takes and the degree to which it is differentiated depend upon the existence of what Ulric Neisser calls "anticipatory schemata" or what Dewey refers to more generally as the "experiential continuum"[9] or as I have called it in our work on evaluation, "connoisseurship".[10] These three concepts are not identical, but they do share similarities. Seeing, like hearing, tasting, and feeling are as Gilbert Rile put it so well not task verbs but achievement verbs.[11] One can look without seeing, listen without hearing, eat without tasting, and touch without feeling. To have a content for consciousness an achievement must be won; one must not merely perform a task. The extent to which our achievements are differentiated and diverse, to that extent will imagination have the stuff with which to work. But if, as Neisser says, anticipatory schemata perform a selective function in perception, their absence in our symbolic repetoire create a kind of self-fulfilling prophecy. What one does not have a schemata for, one is not likely to experience. What one does not experience, one is not likely to miss. Where schemata exist, the probability of experience is increased. In short, we tend to experience what we know how to find. Ernst Gombrich put it well when he said that artists do not paint what they can see, they see what they can paint.

Perhaps it would be well to summarize the major points I've tried to make thus far before moving on to a discussion of their meaning for educational evaluation in general and to our work at Stanford in particular. There are four points that are of particular importance.

First, the aspiration to develop a science of education and the influence of positivistic and operationalistic conceptions of knowledge has severely limited our conception of cognition. If meaning is circumscribed only to propositions that can be validated by logical criteria or by measurement, those fields and therefore those forms of knowing that are neither propositional nor numerical are by definition regarded as non-cognitive. This view of knowledge, I believe, has been a major constraint in education, educational research, and educational evaluation.

Second, the sources of knowledge are at least as diverse as the range of information provided by the senses. Each of the senses provide a unique content that is not replicable by other sense modalities.

Third, concepts can be formed in the imagination by using the content provided by each of the sense modalities. Images of reality are therefore made possible by what the visual, auditory, and the other sensory modalities provide. Concept formation is not limited to what will take the impress of linguistic or numerical terms alone.

Fourth, to make public what has been conceptualized in the imagination requires an ability to competently employ the vocabulary and syntax of a symbol system. Each symbol system, like each sensory system, is nonredundant. What one can say in one is not literally translatable in another. If the skills necessary to make the transformation from image to symbolic expression are not available, expression and hence communication of that content is not possible.

These considerations regarding the nature of cognition did not precede, but followed from the qualitative approach to evaluation in which my students and I have been engaged over the past five years. Once they became explicit rather than implicit, it became easier for me to understand what accounted for my initial uneasiness with conventional approaches to educational evaluation. To cast a net into the sea that is unintentionally designed to let most of the fish get away, and then to conclude from those that are caught what variety of fish there are in the sea is, at the very least, a sampling error of the first order. Then to describe the fish that are caught in terms of their length and weight is to reduce what we can know about the qualitative features of the ones that have been caught, not to mention the features of those that the net failed to catch in the first place. In this sense, I suspect, I might be accused of trying to weave new kinds of nets. So be it.

Let me turn now to our work in evaluation. In our work in evaluation two concepts are of particular importance. The first is what we refer to as <u>educational connoisseurship</u>. The second <u>educational criticism</u>. Educational connoisseurship is the art of appreciation. It is the result of having developed a highly differentiated array of anticipatory schemata that enable one to discern qualities and relationships that others, less well differentiated, are less likely to see. In some respects all of us are connoisseurs of a sort. For some of us the subject matter of our

connoisseurship resides in the appreciation of golf clubs or greens, for others in Baroque music, for others still in football or French wine. For all of us working in the field of education, I suspect, the subject matters of our connoisseurship are found in the precesses of schooling: in the character and quality of teaching, in the interactions of children, in the organization of the school as a whole, and in the use and character of the materials of instruction. The reason connoisseurship is so important is that it provides the content for knowing. It makes possible the stuff we use for reflection.

I said earlier that connoisseurship depends upon the differentiated use of anticipatory schemata. These schemata allow one to bracket phenomena so that they become defined and visible. Some of the schemata may take the form of prefigured concepts that have discursive labels: for example, one might intentionally look for manifestations of "competition" in the classroom and try to determine its sources. But what we decide counts as competition is at base non-discursive. We recognize it by a variety of images we hold. It may manifest itself in the tone of voice that one child uses in speaking to another, it might emerge in the particular way in which someone stands, or in what he or she says. All of this occurs in a living context that plays a significant role in the meaning we give to the tone of voice, the posture, and the content of someone's remarks. To know what counts as competition one must not only have models or schemata of competition to apply;[12] one must also know how those schemata function within a context. Without an appreciation of context conditions the possibility of misinterpreting what one sees is high.

Although all of this might sound abstract and complex, it might be reassuring to note that we do what I have described in our social relations regularly. Perhaps nowhere is it more vivid than at cocktail parties. All of us know quite well how to perceive and interpret the behavior of others at such events. We understand the context, and when someone says to us, "You have never looked better," we reply in kind. We know also that the question "How are you doing?" is neither a request for a dissertation on our recent medical history nor for a report of our bank balance. We have, through acculturation within our social relationships become connoisseurs of a sort and our connoisseurship enables us to respond politely to a polite question, when to bring a conversation to closure, when to initiate one, and when it's time to go home. Our need to survive socially has required us to cultivate high levels of connoisseurship of the social world.

But connoisseurship, as important as it is, is nevertheless a private undertaking. Although we often act upon the information it provides, if we wish to convey what we have come to know to others, we face the problem or transformation. We must find a way of transforming the qualitative aspects of our experience into a form that others can "read".[13] It is in this process that educational criticism is paramount.

Dewey put it this way: "The end of criticism," he wrote, "is the reeducation of the perception of the work of art."[14] The critic's task is neither to use the work as a stimulus for psychological projection, nor is it to be the subject of judicial pronouncements. The function of the critic is to illuminate, to enable others to experience what they might have missed. To do this critics use words. They try to say in words what words cannot say. "It is this paradox," writes Max Kozloff, "that lies at the heart of criticism."[15] How is it done? Not by simply categorizing events as they occur but by constructing an image of what has occurred, an image related to the events but which give them in spoken and written form the level of vitality and meaning that they possessed when they emerged. To achieve such an end the educational critic must be able to use language artistically. He or she must not be discouraged from exploiting the power of language to inform in the multiple ways in which it can inform. In short, language must not be restricted to a didactic, expository mode alone, for to do so is not only to limit what can be conveyed, it is to distort the character of the situation one is trying to understand. "The straight facts," unencumbered by context, are paradoxically non-factual.

Thus the task of the educational critic is to write in a way that will enable the reader to vicariously participate in the events that constitute that aspect of classroom life about which the critic speaks.[16] Such participation makes it possible for the reader to know that aspect of classroom life emotionally. Through it, he is able to know what only the artistic use of language can provide.

Educational criticism, however, is not limited to the artistic description of events. It also includes their interpretation and appraisal. Interpretation as we conceive it is the process of applying theoretical ideas to explain the conditions that have been described. Why is it that this classroom functions in this particular way? Why do these side effects occur? How does the reward structure of this classroom shape the relationships students have with one another? How is time used in this classroom and why does it mean what it means to students? Questions such as these require answers that are more than descriptive, they require the application of relevant theory in the social sciences. The application of such theories to the qualities that have been described constitutes the second important phase or aspect of educational criticism.

The third phase or aspect of educational criticism is concerned with appraisal or evaluation. What is the educational significance of what the children have learned? What is the educational import of what has transpired? What are the educational tradeoffs among the pedagogical devices that the teacher has used and were there alternatives that might have been selected? Please note that this last question begins to soften the distinction between appraisal and supervision and/or "coaching". When an educational critic appraises in a way that is designed to provide con-

structive feedback to the teacher, evaluation begins to perform its most important function: providing the conditions that lead to the improvement of the educational process. In some respects this function of educational evaluation is analogous to the function the conductor performs when guiding an orchestra in the performance of a symphony. The conductor's task is first to hear what the orchestra is playing and to assess it against the schema of the music that he holds. Second, the conductor must locate the discrepancy between the schema and the performance and then provide feedback or criteria that will enable the orchestra to improve its performance. The process is one of making and matching, or schema and correction.* Let me read to you a description of Zubin Mehta's rehearsal of the New York Philharmonic as it was recently reported in the New Yorker:

> "Let's get started." He gave a brisk downbeat for Ravel's "La Valse," which begins with a deep murmur of string basses, a whisper of cellos, and a bassoon solo. After a few bars, he stopped, and looked around at the orchestra. "I would like the first four basses to play pizzacato," he said, "Also, basses, the second and third part of the two trills should be softer." A few minutes later, when the basses were accompanying the violas, Mr. Mehta stopped them again and said, "Sometimes I've done this with one bass, because if you use too many you get a blur. How many are doing it?" Four bass players raised their hands, and Mr. Mehta looked skeptical. "Why don't you change the bow on the F," he said, "so the accent can make the passage clearer. And then, if you could all play also piano . . ." The musicians began again, and Mr. Mehta gradually swept them up into the complex patterns of Ravel's mordant apotheosis of the Viennese Waltz, pausing from time to time to adjust a transition, correct a dynamic, or redefine an entrance. ("Cellos and basses, that pizzicato chord two bars before thirty-four sounds forced. Maybe we can taper down . . . Brass, how staccato can you play those triplets? . . . Basses, don't lose the downbeat after fifty-four; it's the only impulse that is carried right through the piece . . . Bassoon, more legato after sixty-one; it helps the strings.") As "La Valse" reached its tur. .nt climax, Mr. Mehta seemed to become intoxicated by the collective sound of the orchestra. He leaned over the violins, smiling ferociously, his knees bent, his right foot stamping out the rhythm on the podium; whirled in a

*Editor's note: During the presentation of the paper, Dr. Eisner gave more of a dialectic version of the relationship between the conductor's "schema" and "the performance". In this version, schema and performance (as "heard" by The Conductor), are reciprocally related, and hence the heard performance may lead to the conductor's transformation of his own schema.

> semi-crouch to encourage the cellos with his mouth open in a silent scream; and flung his body back in an arch, both arms outstretched above his head, to punctuate each shattering crescendo. During these gymnastics, he was also balancing the orchestral voices with great care, giving precise instrumental cues to produce crisp attacks, and maintaining a clear, rapid beat with the baton clenched in his right hand. As we watched and listened, an invisible current seemed suddenly to flow between musicians and conductor. When the orchestra took a break at the end of the piece, most of the tension in the hall had vanished.[17]

What is clear from Mehta's remarks is that he is able to hear music as a connoisseur--someone who knows--that he also knows what he wants to hear, and that his feedback to the symphony is designed to enable it to successfully approximate the musical image or schemata that he holds. It is an example of schema and correction. There are parallels (but only parallels) to teaching. If the teacher is regarded as the conductor, then the supervisor might be regarded as the resident educational critic. The teacher might be so close to his class that he is no longer able to hear the symphony as clearly as he might, or even as he once did. The critic here provides a fresh eye, has the needed distance to hear what the class is playing, and is able to illuminate those qualities to the teacher in a way that will be helpful. In such a context interpersonal skills and trust between educational critic and teacher is crucial. The teacher must be willing to have a critic in the classroom and must be willing to listen (but not necessarily heed) what the critic says. In this context criticism often takes the form of a dialogue between the teacher and the critic--not quite coaching and not necessarily a written essay about his classroom. Educational criticism in the context of teaching shares similarities with the kind of counsel that marks the dialogue of friends. Trust is a necessary condition. One makes oneself vulnerable only to those who one believes are not intending to hurt.

The mere mention of such a relationship must dramatically illuminate the distance between such a practice and the ways we typically try to improve teaching. The vast majority of teachers--most of us here, including myself--have nothing like such feedback. Most of us try to learn about teaching in the reflections we find in our students' eyes. We sometimes make inferences from their casual remarks or from remarks sometimes made in anger. We reflect on our teaching walking back home after class or rehearse before entering it, but basically we conduct our teaching alone. Few of us ever receive reflective, competent educational criticism about that portion of our professional lives we engage in so often and from which we seek so much satisfaction.[18] As a result most of us are only partially aware of our strengths as teachers, and perhaps more important, what we do that interferes with our teaching. The structure of the institutions

in which we work does not make such feedback likely and the supervision that some teachers receive is often perfunctory or in a mode concerned largely with approval/disapproval rather than with the improvement of performance. The once per year visit of the principal to the teacher's classroom is primarily intended to meet the requirements for determining tenure, rather than something that one colleague does to be helpful to another.[19] Given the complexity of teaching and our apparent desire to improve it, I believe schools need to develop structures that will make sustained observation and feedback possible. The subtleties that count in teaching are not likely to be mastered or even perceived in pre-service programs of teacher education. The occasional workships or lectures that characterize in-service education might also be inadequate. We need, I believe, a much more integrated process of professional development, something that becomes a part of the ongoing life of the school, as much as the coffee break or the pledge to the flag.

I would like to conclude my remarks by turning to some of the unresolved theoretical problems that educational criticism poses.

I have already argued that what we know takes form in a variety of sense modalities and is distilled and expressed in a variety of symbol systems. To secure knowledge of teaching one need not limit one's attention to those pedagogical moves that one can count. Indeed, I have suggested that counting, unencumbered by context, can seriously mislead. After all, does it not seem strange (when one thinks about it) that one would believe that it would be possible to secure meaningful information about teaching through a process (1) that tape records classroom discourse while neglecting visual cues and context, (2) that then transcribes such tapes into typescript, thus eliminating the tone and tempo of voice, (3) that reduces typescripts to the classification and enumeration of pedagogical moves, while neglecting the meaning expressed by the moves, (4) and that further reduces the incidence of moves into central tendencies.[20] The gradual and ineluctable reduction of information leaves precious little with which to form robust generalizations about the complex and subtle enterprise that teaching is. Yet we have persevered in the use of such methods and with meagre results. As Bronfenbrenner has said, such research has little or no ecological validity.[21]

Educational criticism, however, is not without its own problems. Every method contains its own strengths and weaknesses. A high level of precision is possible when one counts but is diminished when one is required to judge. Educational criticism relies upon judgment. Still another problem, and one of its most serious ones, is the tension that exists between using language to artistically describe, and the fact that the use of such language often leads readers to conclude that the description is biased. If an educational critic creates an artistically expressive rendering of a classroom and through it helps another appreciate its emotional meaning or

its "essential character," he or she risks being regarded as biased or as having written something that is not factual. The less expressive a description is, the truer it appears to be--at least in our culture. Yet the very absence of emotional or qualitative content, the more the description might leave out what is important in the classroom. This tension between artistic description and flat reporting is a difficult one to resolve.

Another difficulty centers around our apparent need to draw conclusions that are statable in discursive terms as a summary of our inquiries and the fact that the reduction of an artistically rendered criticism of a classroom to four or five conclusions robs the criticism of what it has to offer in the first place. How does one do justice to the meaning of Saul Bellows' Herzog in a summary of a few sentences. The answer is clear: one doesn't. Yet we seem to have a need to draw concise conclusions, to distill what we have learned, to render what we know to the unambiguity of the third decimal place. In conventional approaches to evaluation and research there is a greater possibility that this can be done without doing violence to the subject being evaluated or researched. It is less likely in material that is artistically rendered since the work as a whole is the message, not an artistically eviscerated symbol of it.

Another difficulty with educational criticism is its costliness.[22] It takes a great deal of time and skill to do well. One does not simply administer a standardized test, analyze the results, and send back a printout to the school. Educational criticism requires one to invest a great deal of time in the classroom and is an activity that requires the critic to be the instrument: the application of a standardized observation schedule in order to count the incidence of occurrences simply will not do. Frankly, I do not know whether in the practical world of schooling such an investment can reasonably be expected, and I do not know what proportion of teachers and administrators can develop the level of connoisseurship and the critical writing skills necessary for making educational criticism useful.

Yet educational criticism and even more the larger epistemological issues it adumbrates, widens the array of tools that we can legitimately use in order to see, understand, and improve, not only teaching but the educational process generally. If the forms of perception, conception, and expression define the content of what we know, then not only is artistic discourse relevant for revealing the qualities that constitute educational practice, but so too are film, video and drama. Perhaps the major virtue of educational criticism is that it expands our understanding of how we come to know, and as a consequence it makes new avenues for educational evaluation and research possible. Even if it does not succeed in becoming a major mode of evaluation in American schools, if it makes that contribution, it will have been enough to have made the effort worthwhile.

REFERENCES

1. Although evaluation is conceptually much wider than testing, testing and evaluation are often regarded as synonymous terms. It should be pointed out that one can test without evaluating and that one can evaluate without testing.

2. Two philosophers whose work has emphasized the different forms of rationality humans can exercise are Suzanne Langer, particularly her most recent work, Mind: An Essay on Human Feeling, Vol. I and II, and Michael Polyani, in his book Personal Knowledge.

3. Much of the work done at Stanford has been in the form of doctoral dissertations. Some of these dissertations are:

   Wesley Dwaine Greer, "The Criticism of Teaching," School of Education, Stanford University, 1973.

   Elizabeth J. Vallance, "Aesthetic Criticism and Curriculum Description," School of Education, Stanford University, 1975.

   Gail McCutcheon, "The Disclosure of Classroom Life," School of Education, Stanford University, 1976.

   Leonard Davidman, "The Formative Evaluation of the Unified Science and Mathematics in the Elementary Schools Curriculum," School of Education, Stanford University, 1976.

   Robin R. Alexander, "Educational Criticism of Three Art History Classes," School of Education, Stanford University, 1977.

   Betty J. Sternberg, "What Do Tokens and Trophies Teach?" School of Education, Stanford University, 1977.

   Leonard M. Berk, "Education in Lives: An Application in Biographic Narrative to the Study of Educational Outcomes," School of Education, Stanford University, 1977.

4. Alfred Jules Ayer, Language, Truth and Logic, New York: Dover Publications, no date, p. 35.

5. The assumptions underlying the taxonomies of educational objectives and the distinctions that are made between the cognitive, the affective, and the psychomotor reflect the ideas embedded in positivistic philosophy.

6. Elliot W. Eisner, "The Impoverished Mind," Educational Leadership. Vol. 35, No. 8, May, 1978.

7. David Olson, "The Arts and Education: Three Cognitive Functions of Symbols." Paper presented at the Terman Memorial Conference, School of Education, Stanford University, October 1978.

8. Suzanne Langer, Problems of Art, New York: Scribners & Sons, 1957.

9. John Dewey, Experience in Education, New York: Minton, Balch and Co., 1934.

10. For a discussion of this concept see my papers, the "Use of Educational Connoisseurship and Educational Criticism for Evaluating Classroom Life," Teachers College Record, Vol. 78, No. 3, 1977, and "Educational Connoisseurship and Educational Criticism, Their Form and Function in Educational Evaluation," Journal of Aesthetic Education, Bicentennial Issue, 1976.

11. Gilbert Ryle, The Concept of Mind, New York: Barnes and Noble, 1962.

12. For a discussion of the concept of "anticipatory Schemata" see Ulric Neisser, Cognition and Reality, San Francisco: W.H. Freeman and Company, 1976.

13. Elliot W. Eisner, "Reading and the Creation of Meaning," Claremont Reading Conference, 40th Yearbook, 1976.

14. Max Kozloff, Renderings: Critical Essays on a Century of Modern Art, New York: Simon and Schuster, 1969.

15. Elliot W. Eisner, op. cit.

16. For a discussion of empathic understanding see Tom Barone, "Inquiry Into Classroom Experience: A Qualitative and Holistic Approach," Ph.D. dissertation, School of Education, Stanford University, 1977.

17. The New Yorker, September 4, 1978, pp. 22-23.

18. During the course of thirteen years of teaching at Stanford University I have never had feedback on the quality of my teaching from a colleague who has observed me teach. I suspect that many colleague teachers have had the same experience.

19. It is ironic that although increasingly teachers are being evaluated so little attention is being given to the kind of evaluation that would increase the quality of their performance. At present the major function of teacher evaluation is to certify competency rather than to improve teaching.

20. This approach to research on teaching has been characteristic rather than exceptional. Most of the observation schedules that have been developed reduce teaching into the incidence of "acts". The "melody" of the enterprise is simply lost in such procedures.

21. Urie Bronfenbrenner, "The Experimental Ecology of Education," Teachers College Record, Vol. 78, No. 2, December 1976.

22. The amount of time that it takes to do adequate educational criticism is considerably larger than the time it takes to use a check-off sheet to describe teaching performance. However, if one compares the utility of the former to the latter, the cost of educational criticism as a means of improving teaching compared to usual descriptive procedures may be smaller than one realizes. The basic question, of course, is a cost-benefit ratio, rather than the determination of cost alone.

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